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## **INTERNATIONAL COMPARATIVE STUDY OF FISCAL DEFICIT IN UKRAINE AND HUNGARY**

**Abstract.** Today government budget scarcity is a relevant problem both for advanced economies and developing countries. Investigation of problems of budget deficit and public debt has had a long history and nowadays it is covered both in modern Ukrainian and foreign scientific literature.

The aim of the paper is to differ causes and factors of genesis of budget deficit, make statistical analysis of fiscal deficits in Ukraine and Hungary and develop recommendations for budget policy. Research methods are dialectical method, historical method, system approach, analysis and synthesis, comparison method, model building, statistical analysis.

Detailed analysis of factors and reasons for formation of general government budget deficit has been given in the paper. Direct causes (such as periods of economic crises, fiscal stimulation, increase in public debt) and concomitant negative factors of deepening budget deficit (such as unfavorable structure of public debt, imbalances of regional development, disadvantages of organization of budget system, disproportionate growth of social expenditures, shadow economy) have been differentiated. A retrospective investigation of budget deficit in Ukraine and Hungary has been carried out. The study is based on indices of budget deficit (deficit coefficient, elasticity of deficit, growth rate of fiscal deficit etc.). Conclusions have been drawn about the depth of this problem in Ukraine and Hungary. The possibilities of implementation of Hungarian experience into Ukrainian economy have been substantiated. The concepts of government budget balancing have been revealed. The system of measures for public policy of budget deficit reduction has been developed, namely: use of acceptable concept of budget balancing, ensuring stable economic growth, ensuring relative decrease in government spending, improving its efficiency, easing impact of related negative factors.

**Keywords:** general government budget deficit, indices of budget deficit, public debt, factors of budget deficit, fiscal policy, Hungary

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## **МІЖНАРОДНИЙ ПОРІВНЯЛЬНИЙ АНАЛІЗ БЮДЖЕТНОГО ДЕФІЦИТУ В УКРАЇНІ ТА УГОРЩИНІ**

**Анотація.** Сьогодні дефіцит державного бюджету є актуальною проблемою як для країн з розвинутою економікою, так і для країн, що розвиваються. Дослідження проблем бюджетного дефіциту та державного боргу має давню історію і в даний час висвітлюється як в сучасній українській, так і зарубіжній науковій літературі.

Метою роботи є виявлення причин і факторів виникнення бюджетного дефіциту, проведення статистичного аналізу бюджетного дефіциту в Україні та Угорщині і розробка рекомендацій щодо бюджетної політики. Методи дослідження: діалектичний метод, історичний метод, системний підхід, аналіз і синтез, метод порівняння, моделювання, статистичний аналіз.

У статті подано докладний аналіз факторів і причин формування дефіциту державного бюджету. Були диференційовані прямі причини (такі як періоди економічних криз, податково-бюджетне стимулювання, збільшення державного боргу) і супутні негативні чинники поглиблення дефіциту бюджету (такі як несприятлива структура державного боргу, дисбаланси регіонального розвитку, недоліки організації бюджетної системи, непропорційне зростання соціальних витрат, тіньова економіка). Проведено ретроспективне дослідження дефіциту бюджету в Україні і Угорщині. Дослідження засноване на показниках дефіциту бюджету (коефіцієнт дефіциту, еластичність дефіциту, темпи зростання дефіциту бюджету та ін.). Зроблено висновки про глибину цієї проблеми в Україні та Угорщині. Обґрунтовано можливості впровадження угорського досвіду в українську економіку. Розкрито концепції балансування державного бюджету. Розроблено систему заходів державної політики щодо скорочення бюджетного дефіциту, а саме: використання прийнятної концепції бюджетного балансування, забезпечення стабільного економічного зростання, забезпечення відносного зниження державних витрат, підвищення їх ефективності, пом'якшення впливу супутніх негативних чинників.

**Ключові слова:** дефіцит бюджету сектору загального державного управління, показники бюджетного дефіциту, державний борг, фактори бюджетного дефіциту, фіскальна політика, Угорщина

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## **МЕЖДУНАРОДНЫЙ СРАВНИТЕЛЬНЫЙ АНАЛИЗ БЮДЖЕТНОГО ДЕФИЦИТА В УКРАИНЕ И ВЕНГРИИ**

**Аннотация.** В статье проведен детальный анализ факторов и причин формирования дефицита бюджета сектора общего государственного управления. Проведен ретроспективный анализ дефицита бюджета в Украине и Венгрии. Исследование основано на показателях дефицита бюджета (коэффициент дефицита, эластичность дефицита, темпы роста бюджетного дефицита и др.). Сделаны выводы о глубине этой проблемы в Украине и Венгрии. Исследованы концепции балансирования бюджетного дефицита. Разработана система мер по государственной политике сокращения бюджетного дефицита.

**Ключевые слова:** дефицит бюджета сектора общего государственного управления, показатели бюджетного дефицита, государственный долг, факторы бюджетного дефицита, фискальная политика, Венгрия

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**Introduction.** Modern national economies experience cyclical nature of their economic development. Financial and economic crises follow upswings and vice versa. Under these conditions governments often carry out expansionary fiscal policy and use budget deficits as a measure for economic recovery. Global financial threats are also an urgent problem. That's why government budget scarcity is a relevant problem both for advanced economies and developing

countries. Also budget deficit is one of the main causes of government debt, which grows year by year and now rises to near or even more than 100% of GDP in USA, Italy, Japan and other countries. However, earlier in economic history public debt inclined sharply only in the periods of wars and downturns.

Investigation of problems of budget deficit and public debt has had a long history [1–4] and nowadays it is covered both in modern Ukrainian [5; 6] and foreign scientific literature [8; 9]. Scientific papers often discuss effects of budget deficits, problems of deficits and debt in the short run and in the long run [9]. Many publications today are devoted to the topic of budgetary and fiscal risks, fiscal rules, study of quasi-fiscal operations [10; 11]. Also there is a topic which generalizes most of the issues mentioned – the problem of sustainability of public debt [12]. However, there still exists an important issue of generalizing the factors and reasons for formation of budget deficit, as well as selecting the list of indicators to measure fiscal deficits and estimate the depth of this problem, and in addition, providing the recommendations for reduction of budget deficits.

World standards of statistical evaluation include analysis of budget deficit and other financial indices at various levels: at the level of central government sector, state governments, local governments, and general government sector as a whole. Analysis at the level of general government enables to reveal problems in public sector, for example, imbalances in intergovernmental fiscal relations, deficit of state social security funds. It is possible to observe effectiveness of performance of governmental social and economic functions in detail. Therefore, analysis of factors and indices of budget deficit of general government sector is a relevant task.

**Literature review and the problem statement.** There are the following objectives of the research: a) to differ causes and factors of genesis of budget deficit; b) to make statistical analysis of fiscal deficits in Ukraine and Hungary; c) to develop recommendations for public policy concerning the ways of budget deficit reduction.

While preparing this research, we used the following research methods: dialectical method, historical method, system approach, analysis and synthesis, comparison method, model building. Also we applied statistical analysis of measures of budget deficit of General Government Sector (according to international classification). We utilized statistical data presented on official website of State Statistics Service of Ukraine and official web-site of European Statistics – Eurostat.

It should be noticed that there are several views on budget deficit presented in a history of economic thought. Ricardian approach states that the fiscal influence of government on economy lies in the present value of its expenditures. Rearrangements of the timing of taxes have no first-order effect on the economy [1, p. 51]. Representatives of neoclassical school reckon that budget deficit increases lifetime consumption by shifting tax burden to next generations. However growth in consumption expands aggregate demand and income in a short run, but in a long run it reduces capital accumulation and restricts economic growth. Upturn of interest rates casts aside the multiplier effect. Keynesians show mostly positive attitude to the deficit and believe that it does not push out private investments, as growing demand enhances return on investment and leads to their growth. Thus, deficit stimulates savings and investments. The model of endogenous growth considers debt financing of deficits as acceptable policy if it is used to promote development of growth-expansionary sectors such as education, healthcare and public infrastructure [2; 13].

Today maybe the most popular and the simplest definition of budget deficit is a situation when expenditures of a budget exceed revenues in a certain sector. For example, this phenomenon can be considered as a specific macroeconomic situation when a government usually spends more than it collects in a form of taxes. Also fiscal deficit is often explained as government budget constraint, and it includes two ways of financing – either sales of bonds or growth in monetary base. Budget Code of Ukraine [14] regards budget deficit as excess of budget expenditures over its revenues, taking into account the difference between granting credits from budget and reimbursement of credits to budget. Some authors reflect mostly negative attitude to fiscal deficit and reckon that it is manifested in financial crisis and reflects an imbalance of macroeconomic indices [5].

**Research results.** It is worthwhile to substantiate why Hungary has been chosen as the object for more detailed investigation of budget deficit problem along with Ukraine. Ukrainian-Hungarian economic cooperation has had a long history, as well as strong social and economic, historical, geographical and cultural backgrounds. Thus, part of present-day Ukrainian lands once belonged to the Austro-Hungarian Empire, and today up to 160 thousand Hungarians live in Transcarpathia region. Hungary is a new member state of the European Union and NATO, and Ukraine has aspirations for European and Euro-Atlantic integration. Both our countries were post-socialist, and they experienced broad-scale transformation of national economic system in 1990s. This transition was accompanied by a systemic socio-economic crisis, which generated economic recession in Hungary and turned to severe and sustained economic meltdown in Ukraine. For instance, GDP decline in Hungary constituted about 20% during 1990–1993, and economic growth resumed in 1994. The highest inflation rate amounted to 34,2% in 1991 and by 1999 inflation was stabilized at 10% [15]. Unfortunately, Ukraine lost more than half of its GDP during 1990s, and peak inflation rate was 10 256% in 1993 [16].

Today our countries are joined by quite close social and economic relationship in the fields of external trade and investment. Hungarian private sector invests into Ukrainian agriculture, pharmaceuticals, chemical industry, banking sector. Cross-border cooperation as well as implementation of infrastructure projects are actively developing. Hungarian program of economic development of Transcarpathia region and Western Ukraine amounts to 100 million euros and is scheduled for 2016–2018. Hungary has opened a 50 million euros credit line for Ukraine and has introduced simplified conditions for employment of Ukrainians.

Obvious negative impact of the global financial and economic crisis of 2008–2009 was also common to our countries (see figure 1). In the context of the global crisis, a number of crucial problems in financial sector of Hungary and Ukraine appeared. Both countries were trying to correct financial and economic situation through the use of IMF stabilization loans. Although economic downturn in Ukraine in 2009 was deeper than in Hungary, economic recovery of our country until 2012 was more dynamic. In 2014–2015 unfortunately Ukraine again has experienced the deep economic crisis.

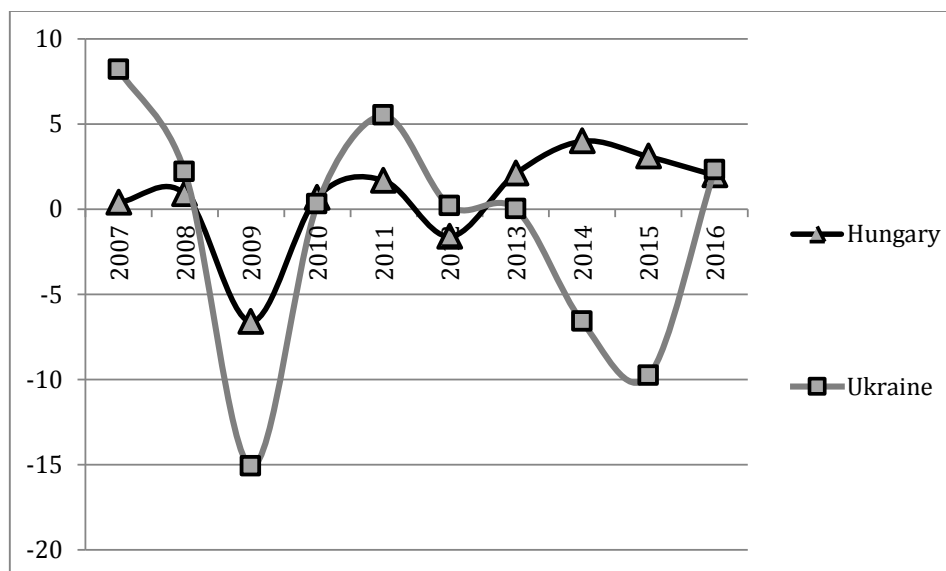


Fig. 1. Real GDP growth rates in Hungary and Ukraine<sup>\*)</sup>

<sup>\*)</sup> composed by authors on the basis of [15; 16]

A lot of indices may be used to analyze government budget deficit, both absolute measures and relative indicators, presented in investigations [5; 17]. For example, they are deficit growth rate, deficit-GDP ratio, deficit-revenues ratio, deficit-expenditures ratio, elasticity of deficit, deficit coefficient (see table 1).

Table 1

№	Index	Formula	Characteristic
1.	Budget deficit	Revenues – Expenditures	Absolute measure; it is a base for calculating other indices
2.	Deficit growth rate	$\frac{\text{Deficit}_1 - \text{Deficit}_0}{\text{Deficit}_0} * 100\%$	Index shows inter-temporal changes
3.	Deficit-GDP ratio	$\frac{\text{Deficit}}{\text{GDP}} * 100\%$	Ratio is used for objective estimation of deficit and cross-country comparisons
4.	Deficit-revenues ratio	$\frac{\text{Deficit}}{\text{Revenues}} * 100\%$	Index shows a fraction of deficit in revenues or to what extent deficit could be compensated by revenues
5.	Deficit-expenditures ratio	$\frac{\text{Deficit}}{\text{Expenditures}} * 100\%$	Index shows a fraction of deficit in expenditures
6.	Deficit coefficient	$\frac{\text{Expenditures}}{\text{Revenues}} * 100\%$	Index shows to what extent expenditures exceed revenues
7.	Revenue-to-spending ratio	$\frac{\text{Revenues}}{\text{Expenditures}} * 100\%$	Index shows amount of public spending covered by revenues
8.	Elasticity of deficit	$\frac{\text{Revenues growth rate}}{\text{Expenditures growth rate}}$	Index shows how revenues growth rate outstrips expenditures growth rate

<sup>\*)</sup> Source: composed by authors on the basis of [5; 17].

Employing these indices, we have achieved the following results. In Ukraine budget deficit is a huge problem (see table 2). In our opinion, the origins of budget deficit problem in Ukraine can be found in a period of systemic economic crisis of the 1990s. As a result of the crisis, government needed more financial funds to perform functions of social protection. That's why expenditures grew, while revenues decreased because of a decline in production. During the entire period of independence Ukraine experienced periodic economic crises (1998, 2008–2009, 2014–2015), which only aggravated the problem of budget deficit.

Table 2

Years	Government deficit / surplus, million UAH	Government deficit growth rate, %	Government deficit, percentage of GDP, %	Deficit-revenues ratio, %	Deficit-expenditures ratio, %	Deficit coefficient, %	Elasticity of deficit, units
2007	-5801,6	0,0	-0,8	-1,9	-1,9	101,9	1,00
2008	-18261,8	214,8	-1,8	-4,4	-4,2	104,4	0,98
2009	-55716,9	205,1	-5,9	-14,3	-12,5	114,3	0,91
2010	-72320,4	29,8	-6,5	-16,0	-13,8	116,0	0,99
2011	-34399,9	-52,4	-2,5	-6,1	-5,8	106,1	1,09
2012	-58281,5	69,4	-4,0	-9,3	-8,5	109,3	0,97
2013	-62819,1	7,8	-4,1	-9,9	-9,0	109,9	0,99
2014	-75602,8	20,4	-4,8	-11,8	-10,5	111,8	0,98
2015	-33168,8	-56,1	-1,7	-3,9	-3,8	103,9	1,08
2016	-51668,8	55,8	-2,2	-5,6	-5,3	105,6	0,98

<sup>\*)</sup> Source: composed by authors on the basis of [18]

Nowadays budget deficit grows every year with the average growth rate (CAGR-indicator) of 27,5%. However, peak heights in 2008–2009 could be explained by world financial crisis. In addition to it, budget deficit as percentage of GDP frequently exceeds the value of -3% approved in European Union. This index even gained -6,5% in 2010. Deficit coefficient shows how much expenditures exceed revenues. In Ukraine it varied from almost 102% to 116% during 2007–2016. Coefficient of deficit elasticity in Ukraine is usually lower than unity, which indicates that growth rate of expenditures is far ahead of growth rate of revenues.

In Hungary, compound average growth rate (CAGR-indicator) of budget deficit is less than in Ukraine and it amounts to -9,6%. This fact means that general trend is positive indicating reduction of fiscal deficit in length of time. Budget deficit as percentage of GDP gained high values in 2009–2011 and recently it has not been higher than 1,5–2% in Hungary (see table 3). Deficit coefficient reached the highest values of 110–112% in post-crisis period of 2009–2011, and has recently been not very high figure. Elasticity coefficient often exceeds the unity, and attests to the fact that revenues usually grow faster than expenditures. All mentioned reveals much more stable position in public finances in Hungary than in Ukraine.

Table 3

Indices of General Government budget deficit in Hungary<sup>\*)</sup>

Years	Government deficit / surplus, million euro	Government deficit growth rate, %	Government deficit, percentage of GDP, %	Deficit-revenues ratio, %	Deficit-expenditures ratio, %	Deficit coefficient, %	Elasticity of deficit, units
2007	-5145,4	0	-5,1	-11,2	-10,1	111,2	1,00
2008	-3912,0	-24,0	-3,6	-8,1	-7,5	108,1	1,03
2009	-4298,3	9,9	-4,6	-10,0	-9,1	110,0	0,98
2010	-4442,2	3,3	-4,5	-10,0	-9,1	110,0	1,00
2011	-5505,5	23,9	-5,5	-12,3	-11,0	112,3	0,98
2012	-2289,7	-58,4	-2,3	-5,0	-4,8	105,0	1,07
2013	-2594,8	13,3	-2,6	-5,5	-5,2	105,5	1,00
2014	-2178,7	-16,0	-2,1	-4,4	-4,2	104,4	1,01
2015	-1701,5	-21,9	-1,6	-3,2	-3,1	103,2	1,01
2016	-2076,4	22,0	-1,8	-4,0	-3,9	104,0	0,99

<sup>\*)</sup> Source: composed by authors on the basis of [19]

The situation with a deficit of General government sector in new member states of the EU is objectively better (see table 4), than in traditional member countries of the EU, where approved deficit-to-GDP ratio is often reached or exceeded. High values of deficit coefficient show that expenditures far exceed revenues. Although not all of the EU countries have a budget deficit, there are also the countries with a surplus of General government sector in 2016, for example, Germany, Bulgaria, Czech Republic, Estonia, the Netherlands.

According to data [15], recently Hungarian economy demonstrated positive dynamics of economic growth (2% in 2016 and 3,2% in 2017), decrease in unemployment up to 4,4% in 2017, and low inflation rates (0,4–2,5% during 2016–2017). As IMF staff report shows [20], effective application of EU funds, low interest rates and export growth, introduction of well-executed expansionary fiscal and monetary policies appear to be the main factors of these positive trends.

As table 4 shows, deficit-GDP ratio in Hungary was one of the lowest when compared with other EU countries in 2016 (-1,8%), and general trend is positive. Also according to data [21], public debt-GDP ratio continues to reduce and amounted to 74,1% in 2016 and 73,9% in 2017, and is projected by IMF to be equal to 71,8% in 2018. Generally IMF reports that as for fiscal policy Hungarian government "outperformed its 2016 fiscal target" due to effective collection of social security taxes and corporate income tax, while expenditures connected with interests and EU funds

decreased. However, IMF staff estimates that external and public debt are still large figures despite their reduction within recent years [20]. In Ukraine, as we know, the situation in the area of public finance is quite opposite. Government budget deficit gained -3.2% of GDP in 2017, public debt having shown substantial increase from 81% of GDP in 2016 to 89% of GDP in 2017 [21].

Table 4

Indices of General Government budget deficit in 2016 in selected countries of EU <sup>\*)</sup>

Country	Government deficit /surplus, million euro	Government deficit, percentage of GDP, %	Deficit-revenues ratio, %	Deficit-expenditures ratio, %	Deficit coefficient, %
Spain	-50576	-4,5	-12,0	-10,7	112,0
France	-75893	-3,4	-6,4	-6,0	106,4
Croatia	-366	-0,8	-1,7	-1,7	101,7
Italy	-40809,4	-2,4	-5,2	-4,9	105,2
Hungary	-2076,4	-1,8	-4,0	-3,9	104,0
Austria	-5430	-1,6	-3,1	-3,0	103,1
Poland	-10252,8	-2,4	-6,2	-5,9	106,2
Slovakia	-1361,5	-1,7	-4,2	-4,0	104,2
United Kingdom	-69856,5	-3	-7,5	-7,0	107,5

<sup>\*)</sup> Source: composed by authors on the basis of [19]

Analyzing growth rates of budget deficit (see table 3) against the backdrop of real GDP growth rates (see figure 1) we can conclude that in Hungary slow but stable economic recovery (except 2012) was accompanied by mainly negative values of deficit growth rates. In Ukraine periods of economic growth were unstable and predominantly did not compensate positive figures of deficit growth.

What were the reasons for impressive Hungarian results? In the early 1990s government budgets were formed with a significant deficit in almost all of the Eastern European countries. Attempts to balance government budget were made, on the one hand, by reducing subsidies to enterprises, military expenditures, certain social programs, and on the other hand by increasing budget revenues. The greatest success in this area was achieved by the Czech Republic, Poland and Hungary. But by 2007 the situation had changed dramatically. Government deficit as percentage of GDP reached -5,1% and GDP growth slowed to 0,4%. Since Hungary became a member of European Union in 2004 it has been under the EU Excessive Deficit Procedure. In 2012 the EU enhanced this Excessive Deficit Procedure by freezing 30% of Hungarian Cohesion Funds. Later in 2012, the EU canceled the freeze because of the evident progress in attempts to moderate government deficit [21].

Over recent years Hungarian authorities have tried to moderate reliance on foreign financial funds. For instance, IMF website evidences that financial position of Hungary as of February 2018 can be described as quite strong and secure. Hungarian authorities have no outstanding purchases and loans and no overdue financial obligations. Stand-by financial arrangements were desisted in 2010, and all repayments, charges and interest had been paid by 2013 [15]. Unfortunately, to our opinion, Ukrainian authorities under conditions of permanent economic crises rely on foreign financing too much, and it leads to emergence of outstanding loans and overdue financial obligations, which increase from year to year.

Also the following measures in the field of fiscal policy and debt sustainability were introduced by Hungarian authorities recently [20]: combating shadow economy by transforming its businesses into formal ones; improving tax collection mechanisms; availability of reliable international reserves that are expected to rise in the future; transforming household loans into national currency; repayment of a certain share of external debt which was denominated in foreign

currency. Corresponding ideas on the assumption of their adaptation may be applied subsequently in the process of development of Ukrainian fiscal policy.

In our view, it is a very important task to distinguish between direct causes of general government budget deficit and its accompanying negative factors. Direct causes of budget deficit are those occurrences that directly promote formation of a stable excess of government expenditures over fiscal revenues. First of all, this is cyclical recession in economy, which automatically leads to a reduction in tax revenues, and at the same time exerts pressure on budget expenditures because of growing unemployment, necessity to increase social transfers, including adjustment for inflation. Secondly, implementation of expansionary fiscal policy tools during a crisis (reducing tax burden, increasing government spending) further deepens the deficit problem. Thirdly, growth of government debt means an increase in debt servicing payments that are accounted in government expenditures. Described phenomena are typical for most of the countries with different economic levels.

It must be admitted that there are a number of specific factors which additionally aggravate the problem of budget deficit and which should be taken into account in a process of developing measures for its overcoming. These factors get their specific manifestation in each country. Let's try to consider such a list of factors.

1. A set of factors related to unfavorable structure of public debt results in disturbance of debt sustainability (they are: significant share of short-term liabilities, high proportion of external debt, as well as debt in foreign currency, having a very negative effect on growth of debt payments along with sharp fluctuations in exchange rate of national currency).

2. Existing problem of deficits of state social security funds may be complicated by unfavorable demographic factors like ageing of population, negative natural increase rate, negative migration balance etc.

3. Deep disparities of regional development may lead to a stable division of regions into successful ones and steadily depressed ones with scarce budgets and needs for significant intergovernmental transfers. Also some contradictions in intergovernmental fiscal relations between central government and regions may result in fiscal imbalances. For example, in Hungary functioning of local government system is not very efficient. Central government delegated new authority to local governments, and at the same time it restricted the volumes of fiscal subsidies. Exactly the same situation takes place in Ukraine now, which results in deepening fiscal imbalances of depressed regions.

4. Ukrainian scientists [6] emphasize existence of a complex of factors of organizational and legal imperfection of budget systems, such as imperfect methods of planning and forecasting, neglect of past recommendations, and poor execution of functions by budget administrators and state financial bodies.

5. Unjustified increase in social standards may occur due to political cycles, and hence it results in growth of budget expenditures on social needs, which leads to inflation and an increase in deficit.

6. Other factors may become significant: insufficiently effective use or inappropriate use of budget funds; presence of shadow economy; hidden deficit, force majeure events.

Most of these factors are unfortunately inherent to Ukrainian economy today and should be eliminated in order to ensure budget deficit reduction and gain dynamic economic growth.

Scientists [3] also pay great attention to political and institutional factors. They tried to explain budget deficits in OECD countries referring to the differences in their political institutions, such as electoral legislation, political parties, budget laws, social inequality, decentralization status, political stability etc.

It is worthwhile to say that attitude of scientists, practitioners and policymakers to the budget deficit is generally negative. It is not surprising because deficit often leads to unacceptable consequences: increase of government debt, interest payments, inflation, rise of tax rates, attempts to narrow range of responsibilities of government in order to reduce budget expenditures etc. Generally there is a close functional deficit-debt relationship. But we should not forget that budget



deficit is unavoidable and even desirable when it is used as a tool of expansionary fiscal policy in a cyclical recession. Some scientists [4] argue that deficits and public debt usually lead to increase in aggregate demand in the short run, but slow down economic growth in the long run.

It is worth mentioning that there are several concepts of budget balancing: annual balancing, balancing within a business cycle, concept of functional finance. Concept of annual balancing assumes that regardless of a business cycle phase each year government expenditures must be equal to revenues. However, an attempt to reduce expenditures during recession leads to its deepening while rising expenditures during upswing leads to economic overheating and inflation. Therefore, the concept of balancing within a business cycle is more adapted to economic reality. In this case budget should be balanced within an economic cycle, not annually [3]. However, there are some other difficulties: the criteria of cycle phases are ill-defined, the phases are different in duration and depth. In light of this, it is difficult to achieve a balanced budget. Theory of functional finance (J. M. Keynes) suggests that the main goal of fiscal policy is to stabilize economy, rather than to gain a balanced budget in any way. Measures of fiscal policy are used as tools of anti-cyclical regulation. And fiscal function of fiscal policy is subordinated to its stabilization function. At the same time, the idea of "deficit financing" can lead to a chronic deficit and a rise in inflation, and Keynesians are often blamed for this fact.

Consequently, due to the cyclical nature of economic development, it is unlikely that a surplus or balanced budget could be ensured each year. Therefore, in our opinion, government policy aimed at annual budget balancing under any circumstances and by any means is not very effective. At the same time, if during a recession government pursues an expansionary fiscal policy, directs expenditures on promising high technology sectors of national economy and uses them effectively, it is hoped that in a period of recovery invested funds will ensure GDP growth and restore budget balance at the expense of growing tax revenues. It should be highlighted that today IMF reports [22] emphasize the special role of modern fiscal policy, which should be countercyclical, growth friendly and inclusive. Moreover, it is expected to perform the functions of economic stabilization, allocation, redistribution. It is somewhat surprising that for the purpose of combating inflation, IMF experts often suggest to balance budgets annually.

How can we handle the problem of budget deficit? To begin with, governments may lay the groundwork for solving this problem by choosing the appropriate budget balancing strategy. Secondly, government should direct efforts to provide high rates of GDP growth, because it is the main source of tax revenues to the budget and generally it is the basis of well-being of a nation. Thirdly, it is possible to propose the following system of recommendations of state policy on budget deficit reduction. In our opinion, this system should contain a set of measures in the following three areas.

1. Ensuring relative decrease in government spending and improving its efficiency should include the following measures: a) targeted use of budget funds; placement of public investment funds in the most promising knowledge-based industries; reducing impact of corruption factors in the process of using budget funds; b) moderation of cyclical nature of economic development in terms of capitalist market system: lowering the amplitude of cyclical fluctuations, reducing the recession phase duration in order to prevent a sharp increase in government spending and a simultaneous fall in tax revenues during a crisis stage; c) provision of debt sustainability maintenance: striving to reduce absolute value of public debt and its ratio to GDP; improving its structure with a reduction of proportion of external debt and debt in foreign currency; appropriate decrease in reducing debt servicing payments as a part of government spending; d) anti-poverty policy: combating poverty, upgrading living standards and quality of life of population will lead to a reduction in the number of people included into socially and economically disadvantaged groups (for example, the phenomenon of "working poor") and a reduction of social transfers share.

2. Increase in budget revenues, primarily due to the growth of tax revenues should contain the following: a) combating shadow economy; b) expansion of tax base through increased production and employment; c) introduction of preferential taxation and tax holidays for small and medium-sized businesses, as well as for innovative sectors and strategic industries; d) ensuring

stability of exchange rate of national currency and reducing inflation rate in order to prevent depreciation of tax revenues during the year; e) restriction of "fiscal function" of privatization process and introduction of the idea that "state is an effective entrepreneur", especially in strategic sectors; availability of state property implies receipt of entire amount of profits into the budget, not only tax liabilities.

3. Measures for elimination of effects of other concomitant factors: a) limiting the influence of political cycles on budget policy; differentiating political activities from stable and consistent public administration; ensuring continuity of fiscal policy; b) easing of regional disparities in economic development: ensuring financial independence, self-financing of regions, which may reduce a share of intergovernmental transfers; c) improving financial discipline and setting clear fiscal rules, both in the private sector and in the general government sector; monitoring of quasi-fiscal operations and reducing their negative impact on financial system; d) upgrade of functioning of budget system, use of cautious scenarios in budget planning, improving quality of macroeconomic calculations and forecasting.

**Conclusions.** As a result, the following conclusions can be drawn. Research in the area of budget deficit is an urgent task for scientists and policymakers of the countries with different levels of social and economic development. Budget deficit of the general government sector is a significant problem in Ukraine and other post-socialist countries and EU countries, which has deepened in recent years.

Ukraine and Hungary were chosen to make an analysis of public finance state, because their economic cooperation has had a long history and cultural backgrounds. Today, our countries are interconnected by close social and economic relations. In the light of dynamics of indicators of budget deficit and public debt in Ukraine and Hungary over the last years, it is obvious that the situation in public finances in Hungary is much more stable and it is headed in the right direction. Hungary managed to reduce reliance on foreign financial funds and it implemented effective measures in the field of fiscal policy and debt sustainability (for instance, improved tax collection mechanisms, transformed household loans into national currency, repaid of a share of external debt in foreign currency), which also could be considered as fruitful for Ukrainian development.

Direct causes and negative factors of deepening budget deficit should be differentiated. Direct causes are frequent periods of economic crises, fiscal stimulation, increase in public debt. Concomitant negative factors include unfavorable structure of public debt, deficits of social security funds, imbalances of regional development, disadvantages of organization of budget system, disproportionate growth of social expenditures, shadow economy. Introducing an acceptable concept of budget balancing, ensuring stable economic growth which enables increase in budget revenues, ensuring relative decrease in government spending and improving its efficiency along with easing impact of related negative factors will help resolve the problem of budget deficit of general government sector. Further research in the discussed area may be aimed at a more detailed analysis and comparison of the situation with the budget deficit in the EU-15 countries and the new EU member states, as well as the state in the EU-28 (before the completion of Brexit) and candidates for membership.

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